

Patent Claims

1. Driving axle for electrically driven vehicles with an electric motor (11) disposed on the driven motor shaft (12) and with drive shafts (14, 15) which are coupled to the motor shaft (12), via the interposition of a reduction transmission stage (13) as well as a following differential transmission, and which are intended for the wheel seated thereon, whereby as part of the reduction transmission stage, an externally toothed sun pinion (19) is disposed on the motor shaft (12), which is mounted in motor shaft bearings (25) connected with the gearbox of the transmission stage, characterized in that the motor shaft bearings (25) are embodied as bearings that absorb radial and axial forces and between the motor shaft bearings (25) and the sun pinion (19) there is disposed a sleeve (26) that is supported on both sides against the motor shaft bearings (25) and the sun pinion (19) and the sun pinion (19), via a securing means (28) disposed on the free end of the motor shaft (12), is fixed against the sleeve (26), and in that the sun pinion (19), and the gears (20) of the reduction transmission stage (13) that meshes therewith, are embodied as helical gears having a force

component that acts in the direction of the motor shaft bearings
(25).

2. Driving axle according to claim 1, characterized in that the sun
pinion (19) is supported directly against the sleeve (26).

3. Driving axle according to claim 1, characterized in that an
intermediate or spacer disk (27) is disposed between sleeve
(26) and sun pinion (19).

4. Driving axle according to one of the claims 1 to 3, characterized
in that the securing means (28) fixes the sun pinion (19) against
the sleeve (26) with preload or bias.

5. Driving axle according to one of the claims 1 to 3, characterized
in that the sun pinion (19) is disposed between the sleeve (26)
and the securing means (28) with slight axial play.